

## Goal 7: Quality Environmental Information

The public and decision makers at all levels will have access to information about environmental conditions and human health to help assess the general environmental health of communities. The public will also have access to educational services and information services and tools that provide for the reliable and secure exchange of quality environmental information.

### **Background and Context**

Accurate, timely, and comprehensive information should be the foundation for virtually every action taken by EPA, states, and others charged with the responsibility to ensure a safer, healthier world for the generations that follow. EPA's obligation to work with other Federal, state, and local allies on homeland security issues is another dimension of EPA's information management activities.

Our response to these challenges, built on the foundation provided by the President's Management Agenda (PMA), requires us to look for new ways to foster existing Agency practices that support this direction. The FY 2004 budget proposals described in this goal represent a major new investment by the Agency to:

- better integrate the information EPA collects to ensure the Agency is better able to set priorities, make sound decisions, manage for results, and measure performance;
- adopt an enterprise-wide approach to managing information, including administrative and programmatic systems, investment priorities, and resource allocation; and,
- work collaboratively with states and other Federal agencies to transform and streamline business practices, develop common and consistent standards and systems, share data, and adopt a citizen-centric approach to information services.

No less important is the need to ensure that environmental information is accessible and usable by the American public – including those who have been historically disenfranchised. Information and the public's ability to acquire, use, and understand it will increasingly become an important tool for addressing environmental problems and challenges.

### **Means and Strategy**

#### Strategy: Information as a Strategic Resource

The context for EPA's information management efforts is the explosion of emerging technologies, such as e-commerce and web services, that enable organizations to become extremely productive, effective, and proactive in service delivery. EPA and as well as other organizations

face a similar underlying challenge: how to get the right data and tools to the right person to ensure quality environmental decisions.

The Agency's broad strategy is to transform its information management activities from the provision of information technology (IT) services (i.e., back room operations focused primarily on component parts of the Agency) to managing information as an enterprise-wide strategic resource.

#### Means: Building the Best Information Capability at the Least Cost

During FY 2004, EPA will pursue three objectives based upon this strategy: to increase the availability of quality, useful health, and environmental information; to provide access to new analytical tools to improve the ease of interpretation and the accuracy of information; and, to improve the Agency's information infrastructure and security.

### **Enterprise Thinking**

To successfully manage IT, EPA must carefully align technology, people, and processes with goals. Identifying the business processes developed to support goals, and the data, the systems, and technology needed is called enterprise architecture. Enterprise architecture drives our investment decisions and ensures that we select the Agency's investments wisely.

EPA's Chief Information Officer (CIO) will continue to pursue an investment strategy to support a strong Agency architecture program and investment management process as outlined by the Federal CIO Council and required by the Clinger-Cohen Act. An enterprise-wide approach to information will allow EPA to make key information, technology, and funding decisions at an Agency-wide level and improve the efficiency and effectiveness of the governance structure and operations. Funding for individual systems development and modernization efforts will remain in individual National Program Manager accounts, but will be governed by the architecture and investment review processes. There are three key points regarding what the Agency builds and how it pays for it.

First, EPA is no different from other Federal agencies that require upgrades and continued maintenance of its IT infrastructure. EPA is proposing a major

investment in this area and proposing that these costs, which are predictable and necessary, be considered as basic to the Agency budget as is the funding for its buildings. It is the cost of doing business in the information age.

Second, the Agency's costs of electronic access to EPA information through its web site, epa.gov, continue to rise as the number of access "hits" increase, as more applications, data processing, and mapping tools become available, and as many of the e-Government (e-Gov) transactions are carried out via the central Agency internet site. Through epa.gov, EPA has developed an increasingly popular mechanism for one-stop access that has ongoing operations and maintenance costs. The Agency recognizes the importance of this mechanism for conducting business with the public and must face its associated cost.

Finally, EPA is aligning IT capabilities with the e-Gov strategy developed as part of the President's Management Agenda (PMA). While the Agency works with states, tribes, and local partners in our day to day environmental business, EPA must likewise commit to the economies and efficiencies that can be derived from collaborating with other Federal agencies. These economies and efficiencies will not only improve the quality of services but will also drive down the cost of basic government functions. The PMA's e-Gov efforts seek to simplify processes and unify operations to better serve citizens' needs. EPA will continue its efforts to implement this vision, and eliminate redundancies and overlaps in such activities as small business compliance, payroll, and other enterprise-wide resource functions, on-line rule making, and geospatial information. Overall, EPA is actively participating in 14 designated e-Gov projects and in all four sectors of the PMA (government to citizen, government to government, government to business, and internal efficiencies).

### **The National Information Exchange Network**

EPA has learned from efforts under the Government Performance and Results Act (GPRA) as well as the draft State of the Environment Report (SOE) - EPA's first national indicator project - that far more data is needed than is currently collected. The latest estimates for the SOE report indicate that at least 40% of the data EPA needs to better measure true environmental outcomes is either missing or unavailable. Some of the data gaps identified can be filled by other Federal agencies and state and local governments.

Based on a five year partnership between leading states and EPA, the Agency is creating an internet-based National Environmental Information Exchange Network (Exchange Network). With the Exchange Network in place, people can quickly and easily share information and EPA will be able to take advantage of the wealth of environmental and health data collected by other Federal agencies, states, and local governments. Others have done this, though most examples are in the private sector with decentralized operations. The Department of

Justice and the Federal Bureau of Investigation have made the most progress, working for the past five years with state and local parties on just such a model.

A number of our state and tribal partners are currently designing their capacity to participate in the Exchange Network. At least 35 states are building integrated, multimedia, geographic-based systems using facility information as the core of the system; and over 40 states and 10 tribes applied in FY 2002 for EPA's \$25.0 million Exchange Network grants. These grants foster technical readiness to share information over the national network.

### **Building Capacity and Creating Centers of Excellence in Regions**

The future of partnership-based information management and a variety of joint planning and innovations efforts depend on working with our state and tribal partners identifying problems and crafting joint solutions. Clearly, an ability to access, analyze, interpret, and respond to data is a core capability necessary to acquire. The EPA regions, and related non-Headquarters sites, have the most critical operational interfaces with external partners. They also are the point of entry for information access by on-scene coordinators and first responders. Currently, inadequate basic IT infrastructure at the regional level impedes consistent, effective access. Implementing the upgrades to deliver reliable, effective capacity to support Agency and external partner information access nationally is a long-term challenge.

Through a combination of a new Agency base investment, one that will continue in the outyears, and a targeted investment of \$10,000,000 in order to address highest priority regional problem areas, EPA proposes to address the information access infrastructure problem in a strategic manner in FY 2004. This will close the major infrastructure gaps at the most vulnerable locations, build a stable foundation for state and tribal partnerships and e-Gov work, and enable subsequent annual network upgrades and maintenance at base levels in the outyears.

### **Performance Measurement**

The enterprise-wide approach to information management supported by this budget proposal is the underpinning of EPA's ability to accurately measure the environmental outcomes of the Agency's programs. The Agency fully supports the performance measurement focus of the PMA and is developing its first national environmental indicators report, entitled the SOE report, and is establishing a comprehensive set of environmental indicators. The Agency is also working to improve the performance measures associated with information management efforts. To the degree that these efforts support other programmatic activities, the performance measures

are more likely to be indirect. EPA is working on outcome measures associated with information access programs that provide information to the public as a means for accomplishing environmental goals.

### **Research**

Research efforts supporting this goal include the Integrated Risk Information System (IRIS). IRIS is an EPA database of Agency consensus health information on environmental contaminants, used extensively by EPA, other federal agencies, states, and the public to access toxicity information that may be needed for performing risk assessments. In FY 2004, EPA will continue the modernization and expansion of IRIS, which began in 2002, including dedicating additional staff to the program. Another effort to support Goal 7 is the Risk Assessment Forum (RAF), which promotes Agency-wide consensus on difficult and controversial risk assessment issues and ensures that this consensus is incorporated into appropriate Agency risk assessment guidance.

Several mechanisms are in place to ensure a high-quality research program at EPA. The Research Strategies Advisory Committee (RSAC) of EPA's Science Advisory Board (SAB), an independent chartered Federal Advisory Committee Act (FACA) committee, meets annually to conduct an in-depth review and analysis of EPA's Science and Technology account. The RSAC provides its findings to the House Science Committee and sends a written report on the findings to EPA's Administrator after every annual review. Moreover, EPA's Board of Scientific Counselors (BOSC) provides counsel to the Assistant Administrator for the Office of Research and Development (ORD) on the operation of ORD's research program. EPA's scientific and technical work products must undergo either internal or external peer review, with major or significant products requiring external peer review. The Agency's Peer Review Handbook (2<sup>nd</sup> Edition) codifies procedures and guidance for conducting peer review.

### **External Factors**

EPA's information comes from many sources, including states, tribes, local governments, research, and industry. Working in partnership with state and tribal governments is an essential element of EPA's information programs. Seeking advice and input from the regulated community and the public will ground EPA's information programs and approaches and make them more responsive to stakeholders' needs. In order to achieve an integrated information network that increases efficiency and fosters information sharing, the Agency must work with those who provide and use EPA's information to ensure that data are maintained effectively, and protected appropriately.

Rapidly changing technology presents opportunities to address mission needs in better ways, as well as challenges where legacy technology must be replaced. The Agency must manage how it adopts new technology from an Agency-wide perspective to gain benefits, minimize risk, and demonstrate incremental, earned-value results. The Agency is also outsourcing major technology operations under performance-based contracts to achieve greater returns and obtain more flexibility in responding to requirements for technology change; whether driven by program needs or technology advances.

The evolving user community will also affect the success of the Agency's information efforts. As more states and tribes develop the ability to integrate their environmental information, the Agency must adjust its systems to receive and process reports from states and industry in keeping with the Agency's statutory requirements. Local citizen organizations and the public at large are also increasingly involved in environmental decision-making, and their need for information and more sophisticated analytical tools is growing.

**Resource Summary**  
(Dollars in thousands)

	<b>FY 2002 Actuals</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>FY 2004 Req. v. FY 2003 Pres Bud</b>
<b>Quality Environmental Information</b>	<b>\$202,315.0</b>	<b>\$199,040.4</b>	<b>\$228,322.1</b>	<b>\$29,281.7</b>
Increase Availability of Quality Health and Environmental Information.	\$125,899.5	\$120,331.1	\$118,203.3	(\$2,127.8)
Provide Access to Tools for Using Environmental Information.	\$49,493.9	\$48,181.3	\$47,071.0	(\$1,110.3)
Improve Agency Information Infrastructure and Security.	\$26,921.6	\$30,528.0	\$63,047.8	\$32,519.8
<b>Total Workyears</b>	<b>846.1</b>	<b>847.1</b>	<b>840.0</b>	<b>-7.1</b>

## Objective 1: Increase Availability of Quality Health and Environmental Information.

Through 2006, EPA will continue to increase the availability of quality health and environmental information through educational services, partnerships, and other methods designed to meet EPA's major data needs, make data sets more compatible, make reporting and exchange methods more efficient, and foster informed decision making.

### Resource Summary (Dollars in Thousands)

	<b>FY 2002 Actuals</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>FY 2004 Req. v. FY 2003 Pres Bud</b>
<b>Increase Availability of Quality Health and Environmental Information.</b>	<b>\$125,899.5</b>	<b>\$120,331.1</b>	<b>\$118,203.3</b>	<b>(\$2,127.8)</b>
Environmental Program & Management	\$98,163.8	\$93,666.1	\$92,638.7	(\$1,027.4)
Hazardous Substance Superfund	\$1,947.6	\$1,665.0	\$564.6	(\$1,100.4)
Science & Technology	\$866.3	\$0.0	\$0.0	\$0.0
State and Tribal Assistance Grants	\$24,921.8	\$25,000.0	\$25,000.0	\$0.0
<b>Total Workyears</b>	<b>496.4</b>	<b>492.1</b>	<b>478.7</b>	<b>-13.4</b>

### Key Program (Dollars in Thousands)

	<b>FY 2002 Enacted</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>FY 2004 Req. v. FY 2003 Pres Bud</b>
Community Assistance	\$650.2	\$921.8	\$0.0	(\$921.8)
Congressional Projects	\$2,078.6	\$1,991.3	\$2,145.2	\$153.9
Congressional/Legislative Analysis	\$4,852.2	\$4,857.8	\$4,958.1	\$100.3
Congressionally Mandated Projects	\$1,100.0	\$0.0	\$0.0	\$0.0
Correspondence Coordination	\$1,200.7	\$1,096.3	\$1,127.7	\$31.4
Data Collection	\$0.0	\$0.0	\$2,854.0	\$2,854.0
Data Management	\$2,400.7	\$2,630.1	\$0.0	(\$2,630.1)
Data Standards	\$500.0	\$2,785.4	\$12,169.6	\$9,384.2

	<b>FY 2002 Enacted</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>FY 2004 Req. v. FY 2003 Pres Bud</b>
Direct Public Information and Assistance	\$8,612.7	\$8,992.6	\$9,475.8	\$483.2
Environmental Education Division	\$9,160.2	\$0.0	\$0.0	\$0.0
Facilities Infrastructure and Operations	\$7,002.0	\$7,031.5	\$7,205.6	\$174.1
Geospatial	\$154.8	\$464.0	\$0.0	(\$464.0)
Homeland Security-Communication and Information	\$600.8	\$476.7	\$0.0	(476.7)
Information Exchange Network	\$25,000.0	\$25,000.0	\$25,000.0	\$0.0
Information Integration	\$4,675.8	\$9,728.5	\$0.0	(\$9,728.5)
Information Technology Management	\$3,872.9	\$3,000.0	\$10,864.9	\$7,864.9
Intergovernmental Relations - OA	\$1,519.8	\$1,835.4	\$2,871.2	\$1,035.8
Legal Services	\$1,979.1	\$2,082.7	\$2,173.0	\$90.3
Management Services and Stewardship	\$1,410.8	\$1,314.9	\$1,797.2	\$482.3
Multi-Media Communications	\$821.3	\$872.7	\$919.4	\$46.7
NACEPT Support	\$1,803.1	\$1,670.1	\$1,692.1	\$22.0
NAFTA Implementation	\$514.3	\$747.9	\$758.5	\$10.6
National Association Liaison	\$346.0	\$262.5	\$267.9	\$5.4
Pesticide Registration	\$570.6	\$221.4	\$0.0	(\$221.4)
Pesticide Reregistration	\$392.2	\$198.1	\$0.0	(\$198.1)
Planning and Resource Management	\$0.0	\$0.0	\$348.6	\$348.6
Public Access	\$4,857.5	\$5,165.2	\$6,118.2	\$953.0
Regional Management	\$1,262.2	\$1,267.8	\$1,400.0	\$132.2
Regional Operations and Liaison	\$547.5	\$477.6	\$487.5	\$9.9
Regulatory Development	\$5,000.5	\$4,817.4	\$5,043.4	\$226.0
Reinventing Environmental Information (REI)	\$5,066.8	\$4,279.1	\$0.0	(\$4,279.1)
SBREFA	\$686.2	\$608.8	\$616.2	\$7.4
Small, Minority, Women-Owned Business Assistance	\$2,295.5	\$3,305.0	\$3,407.3	\$102.3

	<b>FY 2002 Enacted</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>FY 2004 Req. v. FY 2003 Pres Bud</b>
System Modernization	\$6,827.7	\$7,254.6	\$0.0	(\$7,254.6)
Toxic Release Inventory / Right-to-Know (RtK)	\$13,278.0	\$14,206.9	\$11,976.0	(\$2,230.9)
Web Products Quality Control	\$879.5	\$767.0	\$812.4	\$45.4

## Annual Performance Goals and Measures

### Process and Disseminate TRI Information - OEI

In 2004	The increased use of the Toxic Release Inventory Made Easy (TRI-ME) will result in a total burden reduction of 5% for Reporting Year 2003 from Reporting Year 2002 levels.
In 2003	Expanded information on releases and waste management of lead and lead compounds will be reported by 8,000 facilities in TRI in Reporting Year 2001 and increased usage of TRI-ME will result in total burden reduction of 5% for Reporting Year 2002.
In 2002	EPA reduced reporting burden, improved data quality, lowered program costs, and speeded data publication by increasing the amount of TRI electronic reporting from 70% to 92%.

<b>Performance Measures:</b>	<b>FY 2002 Actuals</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>Units</b>
Total electronic reporting of all chemical submissions processed. (Includes diskette submissions created by ATRS, TRI-ME, and other reporting software programs, as well as web-based submissions.)	92			Percent
Facilities reporting releases and waste management of lead and lead compounds.		8000		Facilities
Percentage of TRI chemical forms submitted over the Internet using TRI-ME and the Central Data Exchange.		25	50	Percent

Baseline: In FY 2001, TRI electronic reporting was 70%.

### Information Exchange Network

In 2004	Improve the quality, comparability, and availability of environmental data for sound environmental decision-making through the Central Data Exchange (CDX).
In 2003	Decision makers have access to the environmental data that EPA collects and manages to make sound environmental decisions while minimizing the reporting burden on data providers.
In 2002	The Central Data Exchange (CDX), a key component of the environmental information exchange network, became fully operational and 45 states are using it to send data to EPA; thereby improving data consistency with participating states.

<b>Performance Measures:</b>	<b>FY 2002 Actuals</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>Units</b>
States using the Central Data Exchange (CDX) to send data to EPA.	45	46		States
In preparation for increasing the exchange of information through CDX, implement four data standards in 13 major systems and develop four additional standards in 2003.		8		Data Standards
Number of private sector and local government entities, such as water authorities, will use CDX to exchange environmental data with EPA.			2000	Entities
CDX offers online data exchange for all major national			13	Systems

Performance Measures:	FY 2002 Actuals	FY 2003 Pres. Bud.	FY 2004 Request	Units
<p>systems by the end of FY 2004.</p> <p>Number of states using CDX as the means by which they routinely exchange environmental data with two or more EPA media programs or Regions.</p>			46	States

Baseline: The Central Data Exchange program began in FY 2001.

### Verification and Validation of Performance Measures

#### Performance Measures:

- **Central Data Exchange (CDX) offers online data exchange for all 13 major national systems by the end of FY 2004.**
- **The number of states using CDX as the means by which they routinely exchange environmental data with two or more EPA media programs or regions.**
- **The number of private sector and local government entities, such as water authorities, will use CDX to exchange environmental data with EPA.**

Performance Database: CDX Customer Registration Subsystem.

Data Source: Data are provided by state CDX users.

Methods, Assumptions, and Suitability: All CDX users must register before they can begin reporting to the system. The records of registration provide an up-to-date, accurate count of users. Users identify themselves with several descriptors.

QA/QC Procedures: QA/QC is performed in accordance with a CDX Quality Assurance Plan. Specifically, data are reviewed for authenticity and integrity. Automated edit checking routines are performed in accordance with program specifications and CDX quality assurance guidance.

Data Quality Reviews: CDX successfully completed independent security risk assessment in the summer 2001. In addition, routine audits of CDX data collection procedures and customer service operations are provided weekly to CDX management and staff for review. Included in these reports are performance measures such as the number of CDX new users, number of submissions to CDX, number of help desk calls, number of calls resolved, ranking of errors/problems, and actions taken. These reports are reviewed and actions discussed at weekly project meetings.

Data Limitations: The CDX system collects, reports, and tracks performance measures on data quality and customer service. While its automated routines are sufficient to screen systemic problems/issues, a more detailed assessment of data errors/problems generally requires a secondary level of analysis that takes time and human resources.

Error Estimate: CDX incorporates a number of features to reduce errors, such as pre-populating data whenever possible, edit checks, etc. The possibility of an error in the number of states registered for CDX, e.g., double-counting of some sort, is extremely remote (far less than 1%).

New/Improved Performance Data or Systems: CDX coalesces the registration/submission requirements of many different state-to-EPA data exchanges into a single web-based system. The system allows for a more consistent and comprehensive management and performance tracking of many state customers. The creation of a centralized registration system, coupled with the use of web forms and web-based approaches to submitting the data, invite opportunities to introduce automated quality assurance procedures for the system and reduce human error.

References: CDX website (www.epa.gov/cdx).

**Performance Measure: Percentage of Toxic Release Inventory (TRI) chemical forms submitted over the internet using TRI-Made Easy and the Central Data Exchange.**



Data Source: Facility submissions of TRI data to EPA.

Methods, Assumptions, and Suitability: As part of the regular process of opening the mail at the TRI Reporting Center, submissions are immediately classified as paper or floppy disk. This information is then entered into TRIS. The identification of an electronic submission via CDX is done automatically by the software.

QA/QC Procedures: After the mail room determines whether a submission is on paper or floppy disk, staff review the determination during the normal process of entering and tracking submissions.

Data Quality Reviews: No formal data quality reviews have been conducted.

Data Limitations: Occasionally some facilities send in their forms in duplicative formats: e.g., paper and floppy disc. Both are entered into TRIS, and TRIS then shows the submission as floppy only.

Error Estimate: The error rate has not been assessed. The quality of the data is believed to be high.

New/Improved Performance Data or Systems: None.

References: [www.epa.gov/TRI](http://www.epa.gov/TRI)

### ***Statutory Authorities***

National Environmental Education Act  
Federal Managers Financial Integrity Act  
Government Performance and Results Act  
Clinger-Cohen Act  
Computer Security Act  
Privacy Act  
Clean Air Act (42 U.S.C. 7601-7671q) and amendments  
Clean Water Act (33 U.S.C. 1251 - 1387) and amendments  
Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601-9675)  
Emergency Planning and Community Right-to-Know Act section 313 (42 U.S.C. 110001-11050)  
Government Paperwork Elimination Act  
Federal Insecticide, Fungicide and Rodenticide Act (7 U.S. C. 136-136y)  
Pollution Prevention Act (42 U.S.C. 13101-13109)  
Resource Conservation and Recovery Act (42 U.S.C. 6901-6992k)  
Safe Drinking Water Act section 1445 (42 U.S.C. 300f-300j-26)  
Toxic Substance Control Act section 14 (15 U.S.C. 2601-2692)  
North American Agreement on Environmental Cooperation  
Freedom of Information Act (5 U.S.C. 552)  
Paperwork Reduction Act Amendment of 1995 (44 U.S.C. 3501-3520)  
Small Business Regulatory Enforcement Fairness Act  
Unfunded Mandates Reform Act  
Congressional Review Act  
Regulatory Flexibility Act  
Executive Order 13148, Greening the Government through Leadership in Environmental Management  
Enterprise for the Americas Initiative Act (7 U.S.C. 5404)  
Environmental Research, Development, and Demonstration Act of 1981  
Federal Advisory Committee Act (5 U.S.C. App.)  
Federal Food, Drug and Cosmetic Act  
Federal Insecticide, Fungicide and Rodenticide Act (7 U.S. C. 136-136y)  
Executive Order 12915 - Federal Implementation of the North American Agreement on Environmental Cooperation  
Superfund Authorization Reauthorization Act

## Objective 2: Provide Access to Tools for Using Environmental Information.

By 2006, EPA will provide access to new analytical or interpretive tools beyond 2000 levels so that the public can more easily and accurately use and interpret environmental information.

### Resource Summary (Dollars in Thousands)

	FY 2002 Actuals	FY 2003 Pres. Bud.	FY 2004 Request	FY 2004 Req. v. FY 2003 Pres Bud
<b>Provide Access to Tools for Using Environmental Information.</b>	<b>\$49,493.9</b>	<b>\$48,181.3</b>	<b>\$47,071.0</b>	<b>(\$1,110.3)</b>
Environmental Program & Management	\$35,575.2	\$34,707.9	\$30,757.6	(\$3,950.3)
Hazardous Substance Superfund	\$3,968.6	\$4,105.9	\$930.8	(\$3,175.1)
Science & Technology	\$9,950.1	\$9,367.5	\$15,382.6	\$6,015.1
<b>Total Workyears</b>	<b>164.8</b>	<b>169.7</b>	<b>163.5</b>	<b>-6.2</b>

### Key Program (Dollars in Thousands)

	FY 2002 Enacted	FY 2003 Pres. Bud.	FY 2004 Request	FY 2004 Req. v. FY 2003 Pres Bud
Capacity Building	\$0.0	\$162.8	\$0.0	(\$162.8)
Communicating Research Information	\$5,543.7	\$5,569.6	\$11,399.1	\$5,829.5
Congressionally Mandated Projects	\$6,175.0	\$0.0	\$0.0	\$0.0
Data Collection	\$125.9	\$125.9	\$0.0	(\$125.9)
Data Standards	\$4,839.9	\$3,695.2	\$4,200.6	\$505.4
Environmental Justice	\$5,064.4	\$4,978.8	\$0.0	(\$4,978.8)
Facilities Infrastructure and Operations	\$2,865.7	\$2,345.8	\$2,606.9	\$261.1
Geospatial	\$860.5	\$279.4	\$10,437.5	\$10,158.1
Homeland Security-Communication and Information	\$253.1	\$0.0	\$0.0	\$0.0
Homeland Security-Preparedness, Response and Recovery	\$7.0	\$0.0	\$0.0	\$0.0

	<b>FY 2002 Enacted</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>FY 2004 Req. v. FY 2003 Pres Bud</b>
and Recovery				
Information Integration	\$1,440.3	\$0.0	\$0.0	\$0.0
Information Technology Management	\$7,206.7	\$9,362.1	\$7,761.6	(\$1,600.5)
Legal Services	\$812.2	\$925.0	\$963.0	\$38.0
Management Services and Stewardship	\$918.8	\$799.9	\$1,027.8	\$227.9
Public Access	\$7,252.6	\$9,983.5	\$7,593.1	(\$2,390.4)
Regional Management	\$715.7	\$754.3	\$0.0	(\$754.3)
Reinventing Environmental Information (REI)	\$2,290.9	\$2,277.3	\$0.0	(\$2,277.3)
System Modernization	\$6,265.0	\$5,835.4	\$0.0	(\$5,835.4)
Toxic Release Inventory / Right-to-Know (RtK)	\$877.6	\$1,086.3	\$1,081.4	(\$4.9)

### ***Annual Performance Goals and Measures***

#### **Data Quality**

In 2004	EPA increasingly uses environmental indicators to inform the public and manage for results.
In 2003	The public will have access to a wide range of Federal, state, and local information about local environmental conditions and features in an area of their choice.
In 2002	100% of the publicly available facility data from EPA's national systems accessible on the EPA Website is part of the Integrated Error Correction Process; thereby reducing data error.

<b>Performance Measures:</b>	<b>FY 2002 Actuals</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>Units</b>
Publicly available facility data from EPA's national systems, accessible on the EPA Website, will be part of the Integrated Error Correction Process.	100			Percent
Window-to-My Environment is nationally deployed and provides citizens across the country with Federal, state, and local environmental information specific to an area of their choice.		Nationally		Deployed
Establish the baseline for the suite of indicators that are used by EPA's programs and partners in the Agency's strategic planning and performance measurement process.			1	Report

Baseline: An effort to develop a State of the Environment report based on environmental indicators was initiated in FY 2002.

#### **Research**

#### **Risk Assessment**

In 2005	Through FY2005 initiate or submit to external review 38 human health assessments and complete 12 human health assessments through the Integrated Risk Information System (IRIS). This information will improve EPA's and other decision makers' ability to protect the public from harmful chemical exposure
---------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<b>Performance Measures:</b>	<b>FY 2002 Actuals</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>Units</b>
Complete 4 human health assessments and publish their results on the IRIS website				4 assessments
Initiate or submit to external peer review human health assessments of 30 high priority chemicals.				30 assessments

**Baseline:** The Integrated Risk Information System (IRIS) is an EPA database containing Agency consensus scientific positions on potential adverse human health effects that may result from exposure to chemical substances found in the environment. IRIS currently provides information on health effects associated with chronic exposure to over 500 specific chemical substances. IRIS contains chemical-specific summaries of qualitative and quantitative health information in support of the first two steps of the risk assessment process, i.e., hazard identification and dose-response evaluation. Combined with specific situational exposure assessment information, the information in IRIS may be used as a source in evaluating potential public health risks from environmental contaminants. IRIS is widely used in risk assessments for EPA regulatory programs and site-specific decision making. Updating IRIS with new scientific information is critical to maintaining information quality and providing decision makers with a credible source of health effects information. Risk assessment work in FY 2004 will provide EPA and other decision makers with needed updates to IRIS so they can make informed decisions on how to best protect the public from harmful chemical exposure.

### ***Verification and Validation of Performance Measures***

**Performance Measure:** Establish the baseline for the suite of indicators that are used by EPA's programs and partners in the Agency's strategic planning and performance measurement process.

Performance Database: Repository of indicators (e.g., baseline) compiled during the drafting and finalization of the "State of the Environment Report." To develop the repository, EPA will review indicators that are currently used in the Agency's strategic planning and performance measurement process.

Data Source: Agency planning documents (e.g., EPA's Strategic Plan, Annual Performance Plan, Annual Performance Report, Annual Operating Plan, and National Environmental Performance Partnership Agreements).

Methods, Assumptions and Suitability: The Office of Environmental Information (OEI), the Office of Research and Development (ORD) and the Office of the Chief Financial Officer (OCFO) will review the planning documents and establish a baseline in consultation with key Agency steering committees.

QA/QC Procedures: As the baseline is established, QA/QC protocols also will be developed to ensure that the data supporting the indicators are accurate and complete.

Data Quality Reviews: To be determined and conducted once a baseline has been established.

Data Limitations: The challenge is to develop suitable indicators with sufficient data of known quality.

Error Estimate: To be determined.

New/Improved Performance Data or Systems: The baseline indicators and supporting data for EPA's "State of the Environment Report" are in development.

References: EPA's "State of the Environment Report" and "Technical Support Document" (EPA pub. no. 260-R-02-006) and all EPA planning and performance measurement documents.

**Performance Measure:** Complete 4 human health assessments and publish their results on the IRIS website.

Performance Database: Program output; no internal tracking system

Data Source: N/A

Methods, Assumptions and Suitability: N/A

QA/QC Procedures: N/A

Data Quality Reviews: Assessments

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: N/A

**Performance Measure:** Initiate or submit to external peer review human health assessments of 30 high priority chemicals.

Performance Database: Program output; no internal tracking system

Data Source: N/A

Methods, Assumptions and Suitability: N/A

QA/QC Procedures: N/A

Data Quality Reviews: Assessments

Data Limitations: N/A

Error Estimate: N/A

New/Improved Data or Systems: N/A

References: N/A

### ***Statutory Authorities***

Pollution Prevent Act  
Federal Fungicide, Insecticide and Rodenticide Act  
Federal Food, Drug and Cosmetic Act  
Safe Drinking Water Act  
Federal Managers Financial Integrity Act  
Government Performance and Results Act  
Paperwork Reduction Act  
Freedom of Information Act  
Computer Security Act  
Privacy Act  
Electronic Freedom of Information Act  
Government Paperwork Elimination Act  
National Environmental Education Act  
Federal Managers Financial Integrity Act  
Government Performance and Results Act  
Clinger-Cohen Act  
Freedom of Information Act (FOIA)  
Clean Air Act (42 U.S.C. 7601-7671q) and amendments  
Clean Water Act (33 U.S.C. 1251 - 1387) and amendments  
Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601-9675)  
Emergency Planning and Community Right-to-Know Act section 313 (42 U.S.C. 110001-11050)  
Federal Advisory Committee Act  
Resource Conservation and Recovery Act (42 U.S.C. 6901-6992k)  
Safe Drinking Water Act section 1445 (42 U.S.C. 300f-300j-26)  
Toxic Substance Control Act section 14 (15 U.S.C. 2601-2692)  
North American Agreement on Environmental Cooperation

Small Business Regulatory Enforcement Fairness Act  
Unfunded Mandates Reform Act  
Congressional Review Act  
Regulatory Flexibility Act  
Executive Order 12866  
Plain Language Executive Order Emergency Planning and Community Right-to-Know Act  
Pollution Prevention Act  
Federal Fungicide, Insecticide and Rodenticide Act

Research

Clean Air Act (CAA) and amendments  
Clean Water Act (CWA) and amendments  
Environmental Research, Development, and Demonstration Act (ERDDA) of 1981  
Toxic Substances Control Act (TSCA)  
Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)  
Food Quality Protection Act (FQPA)  
Safe Drinking Water Act (SDWA) and amendments  
Federal Food, Drug and Cosmetic Act (FFDCA)  
Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986  
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)  
Superfund Authorization Reauthorization Act (SARA)

## Objective 3: Improve Agency Information Infrastructure and Security.

Through 2006, EPA will continue to improve the reliability, capability, and security of EPA's information infrastructure.

### Resource Summary (Dollars in Thousands)

	FY 2002 Actuals	FY 2003 Pres. Bud.	FY 2004 Request	FY 2004 Req. v. FY 2003 Pres Bud
<b>Improve Agency Information Infrastructure and Security.</b>	<b>\$26,921.6</b>	<b>\$30,528.0</b>	<b>\$63,047.8</b>	<b>\$32,519.8</b>
Environmental Program & Management	\$21,124.9	\$25,564.5	\$54,922.2	\$29,357.7
Hazardous Substance Superfund	\$3,911.3	\$4,963.5	\$8,125.6	\$3,162.1
Science & Technology	\$1,885.4	\$0.0	\$0.0	\$0.0
<b>Total Workyears</b>	<b>184.9</b>	<b>185.3</b>	<b>197.8</b>	<b>12.5</b>

### Key Program (Dollars in Thousands)

	FY 2002 Enacted	FY 2003 Pres. Bud.	FY 2004 Request	FY 2004 Req. v. FY 2003 Pres Bud
Data Collection	\$0.0	\$0.0	\$600.0	\$600.0
Data Standards	\$0.0	\$0.0	\$11,647.3	\$11,647.3
Facilities Infrastructure and Operations	\$1,648.9	\$1,558.5	\$2,201.6	\$643.1
Geospatial	\$0.0	\$0.0	\$6,035.0	\$6,035.0
Homeland Security-Communication and Information	\$1,928.4	\$0.0	\$1,106.8	\$1,106.8
Information Integration	\$0.0	\$10,428.5	\$0.0	(\$10,428.5)
Information Technology Management	\$17,441.8	\$15,720.2	\$38,690.9	\$22,970.7
Legal Services	\$188.3	\$202.3	\$210.7	\$8.4
Management Services and Stewardship	\$368.1	\$254.2	\$542.0	\$287.8

	<b>FY 2002 Enacted</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>FY 2004 Req. v. FY 2003 Pres Bud</b>
Public Access	\$375.2	\$420.7	\$2,013.5	\$1,592.8
Reinventing Environmental Information (REI)	\$1,266.1	\$1,343.6	\$0.0	(\$1,343.6)
System Modernization	\$597.3	\$600.0	\$0.0	(\$600.0)

## Annual Performance Goals and Measures

### Information Security

In 2004	OMB reports that all EPA information systems meet/exceed established standards for security.
In 2003	OMB reports that all EPA information systems meet/exceed established standards for security.
In 2002	Completed risk assessments on the Agency's critical infrastructure systems (12), critical financial systems (13), and mission critical environmental systems (5).

<b>Performance Measures:</b>	<b>FY 2002 Actuals</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>Units</b>
Critical infrastructure systems risk assessment findings will be formally documented and transmitted to systems owners and managers in a formal Risk Assessment document.	12			Systems
Critical financial systems risk assessment findings will be formally documented and transmitted to systems owners and managers in a formal Risk Assessment document.	13			Systems
Mission critical environmental systems risk assessment findings will be formally documented and transmitted to systems owners and managers in a formal Risk Assessment document.	5			Systems
Percent compliance with 13 criteria used by OMB to assess Agency security programs reported annually to OMB under the Government Information Security Regulatory Act.		75	75	Percent
Percent of intrusion detection monitoring sensors installed and operational.		75	75	Percent

Baseline: In FY 2002, the Agency started planning an effort to expand and strengthen its information security infrastructure.

### Agency-Wide IT Infrastructure

In 2004	Implement Agency-wide information technology upgrades that will incrementally strengthen and expand infrastructure each year to achieve secure, consistent access for mission priorities, and homeland security needs.
---------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<b>Performance Measures:</b>	<b>FY 2002 Actuals</b>	<b>FY 2003 Pres. Bud.</b>	<b>FY 2004 Request</b>	<b>Units</b>
Annual upgrades to technology infrastructure and enterprise information tools occur on schedule per plan, with critical LAN capacity/capability upgrades managed on a five-year replacement cycle.			1	Report

Baseline: The baseline for this program is zero, as it will just begin in FY 2004.

## Verification and Validation of Performance Measures

**Performance Measure:** Annual upgrades to technology infrastructure and enterprise information tools occur on schedule per



plan, with critical local area network capacity/capability upgrades managed on a five-year replacement cycle.

Performance Database: Output measure. During 2004, the Agency will assess options for capturing and reporting on accomplishments in information technology upgrades.

Data Source: The enterprise architecture sequencing plan will contain Agency priorities for annual actions established by senior executive direction. Accomplishments against the plan will be documented through system inventory reports itemizing the successful installation and operations of key components (hardware/ software/application/data store).

Methods, Assumptions and Suitability: Enterprise architecture tools and products (baseline, target and sequencing plan) support executive decision-making for Agency-wide information technology change management. It associates program strategic directions with best technology options and capital planning to achieve cost-effective Agency-wide information technology solutions. Agency enterprise architecture and capital planning will be consistent with Federal models, guidelines and standards, and support explicit linkage of Agency investments with Federal e-government initiatives where applicable. Capital planning is the process used to make IT investments per the Clinger-Cohen Act, and the Office of Management and Budget (OMB) requirements. The Federal government's annual Capital Planning and Investment Control process (CPIC) involves the preparation of justifications for IT investments that are reviewed/approved by the Chief Information Officer (CIO) and the Chief Financial Officer and submitted to OMB as part of the larger budget process. OMB requires all Agencies to have enterprise architectures consistent with the federal enterprise architecture models.

QA/QC Procedures: N/A

Data Quality Reviews: National program managers, the Office of Inspector General (OIG), and the Office of Management and Budget (OMB) review major enterprise architecture tools and products (baseline, target, sequencing plan) before the Agency implements them in final form.

Data Limitations: The enterprise architecture sequencing plan, in particular the technical component describing the annual investments for infrastructure, requires yearly review to ensure consistency with market directions.

Error Estimate: N/A

New/Improved Performance Data or Systems: The Agency is in the process of implementing capital planning and reporting software tools (I-TIPS). It is also creating linkages between the Agency's financial tracking systems and information technology investments to generate information needed for executive review of information technology investment progress. Financial tracking is the means to confirm actual spending against planned levels to identify potential variances.

References: Enterprise architecture products will be made accessible via the EPA internet with the exception of security architecture components, which will be reserved for reference on a need-to-know basis.

**Performance Measure: Percent compliance with 13 criteria used by Office of Management and Budget (OMB) to assess Agency security programs reported annually to OMB under Government Information Security Regulatory Act.**

Performance Database: The Office of Environmental Information (OEI) maintains historical files of OMB's written assessment of EPA's annual security program report.

Data Source: EPA's security staff, located within the Office of the Chief Information Officer (CIO), track Agency compliance with the OMB criteria.

Methods, Assumptions, and Suitability: N/A

QA/QC Procedures: OEI reviews, interprets, and verifies the basis for OMB's written assessment. Physical tests of Agency systems are conducted using best industry practice testing protocols. Automated monitoring tools test for and audit compliance with IT security standards. The Agency certifies results to OMB, but does not send detailed data from tests because of the sensitive nature of the information; inadvertent release of this information could compromise the Agency's information technology (IT) security infrastructure. EPA's IT planning staff, under the CIO, check for appropriate security planning and procedures as part of the Information Technology Management Reform Act (ITMRA) capital planning and investment process required by federal law.

Data Quality Reviews: Program offices are required to develop security action plans composed of tasks and milestones in a number of security action areas, including OMB's 13 criteria compliance areas. Program offices self-report progress toward

these milestones. EPA's security staff reviews the self-reported data and discusses anomalies with the submitting office.

Data Limitations: Resources constrain the security staff's ability to validate all of the self-reported compliance data submitted by program systems' managers.

Error Estimate: N/A

New/Improved Data or Systems: NA

References: N/A

**Performance Measure: Percent of intrusion detection monitoring sensors installed and operational.**

Performance Database: Output measure. None

Data Source: Contractor task reports, verified by OEI.

Methods, Assumptions, and Suitability: NA

QA/QC Procedures: The Quality Assurance procedures are established in OEI's contractual agreements with IT security contractors responsible for monitoring the intrusion detection sensors. The procedures are a combination of automated and manual processes managed by independent contractors and validated by EPA personnel.

Data Quality Reviews: N/A

Data Limitations: Data reflect the contractor's completion of technical tasks that are easily verified by OEI. Thus, there are thus no serious data limitations.

Error Estimate: N/A

New/Improved Data or Systems: NA

References: N/A

### ***Statutory Authorities***

Federal Advisory Committee Act  
Government Information Security Reform Action  
Comprehensive Environmental Response, Compensation, and Liability Act  
Clean Air Act and amendments  
Clean Water Act and amendments  
Environmental Research, Development, and Demonstration Act of 1981  
Toxic Substance Control Act  
Federal Insecticide, Fungicide, and Rodenticide Act  
Food Quality Protection Act  
Safe Drinking Water Act and amendments  
Federal Food, Drug and Cosmetic Act  
Emergency Planning and Community Right-to-Know Act  
Comprehensive Environmental Response, Compensation, and Liability Act  
Superfund Amendments and Reauthorization Act  
The Government Performance and Results Act (1993)  
Government Management Reform Act (1994)  
Clinger-Cohen Act  
Paperwork Reduction Act  
Freedom of Information Act  
Computer Security Act  
Privacy Act  
Electronic Freedom of Information Act  
Pollution Prevention Act